

**METHOD FOR THE DETECTION OF VOLATILE ORGANIC COMPOUNDS
USING A CATALYTIC OXIDATION SENSOR**

Abstract

A means for detecting volatile organic compounds which utilizes a catalytic material to oxidize volatile organic compounds at temperatures substantially lower than the autoignition temperature of the compound. Because this reaction is exothermic, a thermistor in contact with the catalytic material is used to detect the heat evolved as volatile organic compounds are oxidized to carbon dioxide and water at the catalyst surface. Upon comparison to a reference thermistor, relative increases in the temperature of the sensing thermistor correspond positively with an increased concentration of volatile organic compounds and are thus used as an indicator of the presence of such compounds.